What is claimed is:

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- 1. A pharmaceutical composition comprising a safe and effective amount of human liver regeneration associated protein hLRTM4, and a pharmaceutically acceptable vehicle, diluent or carrier.
- 2. The composition of claim 1, wherein the hLRTM4 protein has the amino acid sequence as shown in SEQ ID NO:2
- 3. The composition of claim 1, wherein the safe and effective amount of hLRTM4 is 1µg 5 mg/kg body weight per day.
- 4. A use of liver regeneration associated protein hLRTM4 in the preparation of a drug used for treating liver injury.
- 5. The use of claim 4, wherein the drug is used to treat acute or chronic hepatitis, liver cirrhosis, or liver pathological changes caused by liver cancer.
- 6. A pharmaceutical composition comprising a safe and effective amount of antagonists of hLRTM4 protein, wherein the antagonists are selected from the group consisting of: (i) an antisense polynucleotide to hLRTM4, wherein the polynucleotide has the antisense nucleotide sequence as shown in SEQ ID NO: 1 and has a length of 15-625bp, (ii)small interfering double-strand RNAs of hLRTM4, wherein the RNAs have the nucleotide sequence as shown in SEQ ID NO:1 and have a length of 17-23bp and a 3'-terminal dtdt sequence; and/or (iii) a specific antibody against hLRTM4, as well as a pharmaceutically acceptable vehicle, diluent or carrier.
- 7. The composition of claim 6, wherein the polynucleotides has the full-length antisense sequence to SEQ ID NO:1.
- 8. The composition of claim 6, wherein the safe and effective amount of antagonist to hLRTM4 is lug 5mg/kg body weight per day.
- 9. A use of hLRTM4 protein antagonist for the preparation of a drug for treating hepatocellular carcinoma, wherein the antagonist is selected from: (i) an antisense polynucleotide to hLRTM4, wherein the polynucleotide has the nucleotide sequence as shown in SEQ ID NO: 1 and has a length of 15-625 bp; (ii) a small interfering double-strand RNA of hLRTM4, wherein the RNA has the nucleotide sequence as shown in SEQ ID NO:1 and has a length of 17-23 bp and a 3'-terminal dtdt sequence; and/or (iii) a specific antibody against hLRTM4.
- 10. The use of claim 9, wherein the antagonist is an antisense polynucleotide to hLRTM4, wherein the polynucleotide has the nucleotide sequence as shown in SEQ ID NO: 1 and has a length of 15-625 bp.